

## CLAIMS:

1. A power converter for supplying an output power to a load, comprising:

a switching device having a switching input, a switching output,

5 and a control input for enabling or disabling said switching device from conducting current from said switching input to said switching output; and

a network wherein said switching device input, said switching device output, and the load are connected together in a circuit;

a bias winding in said circuit for producing a bias voltage representative of the output power; and

a control circuit for (a) determining the rate of change of said bias voltage, (b) characterizing said rate of change, and  
15 (c) controlling said control input as a result of the characterization (b).

2. The power converter of claim 1, further comprising a power input portion and a power output portion for providing said output power, wherein said circuit is in said power output portion.

20 3. The power converter of claim 2, further comprising a connecting portion for coupling said power input portion to said power output portion, wherein said

connecting portion includes an inductor as part of said power output portion, wherein said bias winding is coupled in series with said inductor.

4. The power converter of claim 3, wherein said connecting portion includes a transformer having a primary winding as part of said power input portion and  
5 a secondary winding which includes said inductor.

5. The power converter of claim 1, wherein said control circuit is adapted so that the determination (a) includes comparing said bias voltage at a selected time relative to a selected starting value of said bias voltage, and so that the characterization (b) includes comparing the change in said bias voltage in (a) to a reference.

10 6. The power converter of claim 2, wherein said control circuit is adapted so that the determination (a) includes comparing said bias voltage at a selected time relative to a selected starting value of said bias voltage, and so that the characterization (b) includes comparing the change in said bias voltage in (a) to a reference.

15 7. The power converter of claim 3, wherein said control circuit is adapted so that the determination (a) includes comparing said bias voltage at a selected time relative to a selected starting value of said bias voltage, and so that the characterization (b) includes comparing the change in said bias voltage in (a) to a reference.

20 8. The power converter of claim 4, wherein said control circuit is adapted so that the determination (a) includes comparing said bias voltage at a selected time relative to a selected starting value of said bias voltage, and so that the characterization (b) includes comparing the change in said bias voltage in (a) to a reference.

9. The power converter of claim 5, wherein said control circuit is adapted so that the determination (a) includes comparing said bias voltage at a selected time relative to a selected starting value of said bias voltage, and so that the characterization (b) includes comparing the change in said bias voltage in (a) to a reference.

5 10. The power converter of claim 5, wherein said characterization (b) includes determining whether the rate of change is either high or low compared to said reference.

11. The power converter of claim 6, wherein said characterization (b) includes determining whether the rate of change is either high or low compared to said  
10 reference.

12. The power converter of claim 7, wherein said characterization (b) includes determining whether the rate of change is either high or low compared to said reference.

13. The power converter of claim 8, wherein said characterization (b)  
15 includes determining whether the rate of change is either high or low compared to said reference.

14. The power converter of claim 9, wherein said characterization (b) includes determining whether the rate of change is either high or low compared to said reference.

20 15. In a power converter, a method for supplying an output power to a load,

comprising the steps of:

providing a power input portion;

providing a power output portion comprising a switching device having

5 a switching input, a switching output, and a control input for enabling or disabling said switching device from conducting current from said switching input to said switching output, and a network wherein said switching device input, said switching device output, and the load are connected together in a circuit;

providing a bias voltage representative of the output power;

10 determining the rate of change of said bias voltage;

characterizing said rate of change; and

controlling said control input as a result of said step of characterizing.

16. The method of claim 15, wherein said step of determining includes comparing said bias voltage at a selected time relative to a selected starting value of  
15 said bias voltage, and wherein said step of characterizing includes comparing the change in said bias voltage in said step of determining to a reference.

17. The method of claim 16, wherein said step of characterizing includes determining whether the rate of change is either high or low compared to said reference.